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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/954,713	09/18/2001	Seiji Ishikawa	782_183	7609

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EXAMINER

KWOK, HELEN C

ART UNIT PAPER NUMBER

2856

DATE MAILED: 12/02/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/954,713

Applicant(s)

Ishikawa et al.

Examiner

H. Kwok

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Sep 18, 2001
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 5 6) ☐ Other:

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## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Specification*

2. The disclosure is objected to because of the following informalities. Appropriate correction is required.

There is no description in the specification for reference numeral "6c" as illustrated in Figure 1.

On page 7, line 3, the word "Nest" is misspelled. It should be changed to -- Next --.

### *Claim Objections*

3. Claims 2, 5-6, 8-16 and 18 are objected to because of the following informalities. Appropriate correction is required.

In claim 2, line 2, the word -- said -- should be inserted after the word "and".

In claim 5, line 3, what is the word "its" referring to? In line 4, the word -- said -- should be inserted before the word "supporting". In line 4, the word -- said -- should be inserted before the word "circuit". In line 4, the word -- said -- should be inserted after the word "and".

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In claim 6, line 6, the word -- said -- should be inserted before the word "supporting". In line 6, the word -- said -- should be inserted before the word "semiconductor".

In claim 8, line 12, the word -- said -- should be inserted before the word "vibration" (second occurrence).

In claim 9, line 2, the word -- said -- should be inserted before the word "semiconductor".

In claim 18, line 2, the word -- said -- should be inserted before the word "semiconductor".

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-21 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,783,748 (Otani).

With regards to claims 1-7, Otani discloses a semiconductor sensor package comprising, as illustrated in Figures 1-2 and 24, a vibrating element 1a; a vibration element supporting member 1b for supporting the vibration element; a circuit board 1 (i.e. a HIC board) for supporting the vibration element; a semiconductor integrated circuit chip (since the circuit board

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is a HIC board, circuit chips are provided on the board) for controlling signals from the vibration element; a base and a lid to form a can-package 3 for securing the vibrating element, the supporting member, the circuit board and the circuit chip such that the circuit chip is mounted on the circuit board by bonding (i.e. flip-chip or bare-die, which are well known as provided in the specification of the present application) and the vibration element is mounted to the circuit chip by the supporting member. Furthermore, the vibration element and circuit chip are arranged to be overlapped and parallel with each other. (See, column 1, lines 11-52 and column 5, line 36 to column 6, line 60).

With regards to claims 8-21, the claims are commensurate in scope with claims 1-7 and are rejected for the same reasons as set forth above.

6. Claims 1-21 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 6,094,984 (Asano et al.).

With regards to claims 1-7, Asano et al. discloses a semiconductor sensor package comprising, as illustrated in Figures 2-3 and 12, a vibrating element 2; a vibration element supporting member for supporting the vibration element (not shown; however, one knows a support is used to mount the vibrating element); a circuit board 3 for supporting the vibration element; a semiconductor integrated circuit chip E for controlling signals from the vibration element; a base 5 and a lid 7 to form a can-package for securing the vibrating element, the supporting member, the circuit board and the circuit chip such that the circuit chip is mounted on

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the circuit board by bonding (i.e. flip-chip or bare-die, which are well known in the art as disclosed in the specification of the present application) and the vibration element is mounted to the circuit chip by the supporting member. Furthermore, the vibration element and circuit chip are arranged to be overlapped and parallel with each other. (See, column 3, line 61 to column 4, line 31).

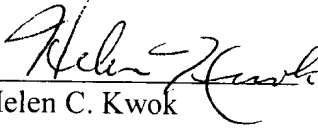
With regards to claims 8-21, the claims are commensurate in scope with claims 1-7 and are rejected for the same reasons as set forth above.

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The references cited are related to sensor packaging having a circuit board and circuit chip mounted on the circuit board.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen Kwok whose telephone number is (703) 308-8149.

  
Helen C. Kwok  
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hck  
November 21, 2002